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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,422	03/31/2004	Giovanni Coglitore	443452001800	7697
25226	7590	10/05/2005		
MORRISON & FOERSTER LLP 755 PAGE MILL RD PALO ALTO, CA 94304-1018			EXAMINER WRIGHT, INGRID D	
			ART UNIT	PAPER NUMBER
			2835	
DATE MAILED: 10/05/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/815,422

Applicant(s)

COGLITORE ET AL.

Examiner

Ingrid Wright

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/1/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garnett et al. 2005/0047098 A1.

With respect to claim 1, Garnett et al. teaches (fig. 1-3) a computer rack 31; a first stack 53 and a second stack 55 provided in the computer rack 31, each stack 55 comprising one or more computers, a cooling plenum 66 configured such that cooling air can flow between the computers in the first stack 53 and the cooling plenum 66 and configured such that cooling air can flow between the computers in the second stack 55 and the cooling plenum 66.

With respect to claim 2, Garnett et al. teaches the first stack and the second stack are positioned such that an overlapping portion of the back side of the first stack faces an overlapping portion of the back of the second stack, an exposed portion of the first stack faces the first cooling plenum, and an exposed portion of the second stack faces the second cooling plenum.

With respect to claim 3, Garnett et al. teaches mounting brackets (see, for example col. 2, par. 0029), uprights 32,33,34,34 & apertures 66 disposed between the stacks 53,55 and the cooling plenum 66 and configured to allow cooling air to flow between the stacks 53, and the cooling plenum 66.

With respect to claim 4, Garnett et al. teaches fans 290,291 configured to force into more than one computer in the first stack 53 and additional fans in FRU in the PSUs 81 with apertures 68 which act as air vents for a flow of air to the plenum chamber 66.

With respect to claim 5, Garnett et al. teaches a power interface configured to couple with a power interface on one of the computers in the first stack when the computer is inserted into the computer rack 31.

With respect to claim 6, Garnett et al. teaches a power supply 81 disposed external to the computers in the first stack and coupled to the power interface.

With respect to claim 7, Garnett et al. teaches the first stack 53 is in fluid communication with the cooling plenum 66.

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With respect to claim 8, Garnett et al. teaches openings 185 for channeling cooling air from the computer rack 31 to a location exterior to the site where the computer rack is located.

With respect to claim 9, Garnett et al. teaches an air conditioning system 66,185 290,291 for supplying cooling air to the computer rack 31.

With respect to claim 10, Garnett et al. teaches a computer rack 31 comprising a first region 53 configured to retain a first stack of computers and a second region 55 configured to retain a second stack of computers adjacent to the first stack of computers such that a cooling plenum 66 is in fluidic communication with computers disposed in the first stack of computers and the second stack of computers.

With respect to claim 11, Garnett et al. teaches the computer rack comprises a first access side and a second access side opposite the first access side such that the first region and the second cooling plenum are disposed adjacent the first access side and the second region and the first cooling plenum are disposed adjacent the second access side.

With respect to claim 12, Garnett et al. teaches the computer rack is configured to hold the first and second stack of computers 53,55, except

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such that an overlapping portion of the first stack of computers faces an overlapping portion of the second stack of computers and an exposed portion of the first stack of computers faces the first cooling plenum and an exposed portion of the second stack of computers faces the second cooling plenum.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the stack arrangement as taught by Garnett et al. with an overlapping arrangement, as an alternate of allowing air to flow to between the first and second stacks of computers and the cooling plenum.

With respect to claim 13-15, the method steps recited in the claim are inherently necessitated by the device structure as taught by Garnett et al. Garnett et al. a plurality of computer components in a computer rack 31, first and a second computer stacks provided in the computer rack 31, cooling air passed through the first computer and out of an exposed portion of the back of the first computer and a first cooling plenum 66 and cooling air passed through the second computer and out of exposed portion of the back of the second computer and into a second cooling plenum 66.

With respect to claim 16, Garnett et al. teaches a support structure configured to support a first stack of computers 53 and a second stack of computers 55 in a back-to-back (side-side-side) configuration.

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With respect to claim 17, Garnett et al. teaches a first stack of computers 53 provided in the support structure; and a second stack of computers 55 provided in the support structure.

With respect to claim 18, Garnett et al. the support structure comprises a computer rack 31 and a plurality of computer chassis support brackets (see, for example col. 2, par. 0029) configured to support the first stack of computers on a first side of the computer chassis and a second stack of computers on a second side of the computer chassis.

With respect to claim 19, Garnett et al. teaches chassis support brackets (see, for example col. 2, par. 0029) are further configured to support a first plurality of fans 290,291 and additional fans in FRU in the PSUs 81 with apertures 68 which act as air vents for a flow of air to the plenum chamber 66 and fans in FSUs for moving air into or out of the stacks of computers.

With respect to claim 20, Garnett et al. teaches the computer chassis support brackets are further configured to support a first 175,177 plurality of power connectors for connection with the stacks of computers

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Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US 2005/0068716 A1 show the state of the art regarding a computer rack configuration.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ingrid Wright whose telephone number is (571) 272-8392. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571) 272-2800, ext 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IDW


LYNN FEILD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800